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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/086,370 | 02/28/2002 | Michael E. Childs | 1528.005US1 | 2692 |

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EXAMINER



MANCHO, RONNIE M

ART UNIT PAPER NUMBER

3663

DATE MAILED: 10/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|--|-----------------|---------------|---|
|  Office Action Summary | Application No. | Applicant(s) | |
| | 10/086,370 | CHILDS ET AL. | |
| | Examiner | Art Unit | |
| | Ronnie Mancho | 3663 |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 October 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 and 25-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 and 25-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

1. Claims 1, 3-5, 9, 12, 25, 27, 28, 30-32 are objected to because of the following informalities: In claims 1, 3-5, 9, 12, 25, 27, 28, 30-32 the applicant claims “compress and pack”, but in applicant’s specification, page 2, line 2, the applicant discloses “compress or pack”. The applicant is advised to cancel “compress” or “pack” as disclosed in the specification since both words tend to have the same meaning as taught in the specification. The rejection also applies to the claims amended with “decompress or unpack”, “compressed or packed”, “decompressed or unpacked”, or words with similar tenses. Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

3. Claims 1-2, 6-12, 25-32 are rejected under 35 U.S.C. 102(e) as being anticipated by Ito et al (6484093).

Regarding claim 1, Ito et al (fig. 1; col. 7, lines 1-50) disclose a navigation navigational device 100, comprising:

a processor 101;

a memory 30 in communication with the processor 101 (fig. 1);

a display 106 in communication with the processor 101, wherein the device uses the memory 30 in cooperation with the processor 101 to compress (although the word “compress” is not used by the prior art, col. 11, lines 59 to col. 12, lines 1-5 teach the concept of data compression) or pack (note, in applicant’s specification, compression or packing mean the same thing since applicant disclosed “compression or packing” in the specification. Therefore adding “pack” to the claim limitation does not change the scope of the claim) a plurality of coordinate data (col. 7, lines 30-45; fig. 4) into reduced sizes (when there is compression, the size of the data compressed is inherently reduced and although the prior art did not use the word “reduced sizes” it teaches the concept of compression, therefore the limitation “reduced sizes” is inherently taught) and associate at least a portion of activation data with each coordinate data (col. 7, lines 30-45; figs. 13, etc), each coordinate data having three or more dimensions (col. 8, lines 36-47. Note that all GPS data inherently have three or more coordinate representation of positions), and wherein at least a portion of the coordinate data is dynamically communicated to the display (106; col. 7, lines 30-65; col. 11, lines 59 to col. 12, lines 1-5).

Regarding claim 2, Ito et al disclose the device of claim 1, further comprising an interface device operable to audibly communicate at least a portion of the coordinate data.

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Regarding claim 6, Ito et al disclose the device of claim 1, wherein at least one of the dimensions is associated with attribute data relating to at least one of the other dimensions (col. 8, lines 36-47. Note that all GPS data inherently have three or more coordinate representation of positions).

Regarding claim 7, Ito et al disclose the device of claim 1, wherein the device is a handheld portable device.

Regarding claim 8, Ito et al disclose the device of claim 1, wherein the memory 30 is remote from the processor 101.

Regarding claim 9, Ito et al (fig. 1; col. 7, lines 1-50) disclose a navigation system, comprising:

- a mass storage device 30 adapted to store navigation data;

- a server (portable communications systems nowadays use internet; col. 7, lines 7-12) adapted to communicate with the mass storage 30; and

- a navigation device 100 adapted to communicate with and retrieve navigation data from the server via a communication channel (fig. 1), wherein the navigation device includes a processor 101 in communication with a memory 102B, wherein the processor and memory cooperate to compress or pack (note, in applicant's specification, compression or packing mean the same thing since applicant disclosed "compression or packing" in the specification. Therefore adding "pack" to the claim limitation does not change the scope of the claim) at least three dimensional data (col. 8, lines 36-47. Note that all GPS data inherently have three or more coordinate representation of positions) into reduced sizes (when there is compression, the size of the data compressed is inherently reduced and although the prior art did not use the word

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“reduced sizes” it teaches the concept of compression, therefore the limitation “reduced sizes” is inherently taught), and wherein the at least three dimensional data is associated with the navigation data and activation data (col. 7, lines 30-65; col. 11, lines 59 to col. 12, lines 1-5).

Regarding claim 10, Ito et al disclose the system of claim 9, wherein the communication channel includes a wireless channel.

Regarding claim 11, Ito et al (inherently) disclose the system of claim 9, wherein the activation data are configurable to activate or deactivate each dimension within the at least three dimensional data of the navigation data.

Regarding claim 12, Ito et al disclose the system of claim 11, wherein the navigation data are compressed within the memory.

Regarding claim 25, Ito et al disclose a navigational device, comprising:

a memory;

a display;

a processor that cooperates with the memory to compress navigation data having three or more dimensions wherein the navigation data includes control data and coordinate data; and

a Global Positioning Satellite (GPS) receiver that cooperates with the processor and provides to the processor specific values for coordinate data, wherein the processor matches the values with portions of the compressed or packed navigation data using the control data and dynamically decompresses or unpacks those matched portions into larger and original sizes (when there is decompression, the size of the data decompressed is inherently converted into larger original sizes. Although the prior art did not use the word “larger and original sizes” it teaches the concept of decompression, therefore the limitation “larger and original sizes” is

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inherently taught) and communicates the decompressed or unpacked matched portions to the display.

Regarding claim 26, Ito et al disclose the navigational device of claim 25, wherein the navigation device is a portable digital assistant.

Regarding claim 27, Ito et al disclose the navigation device of claim 25, wherein the navigation data includes attribute data within one or more of the three or more dimensions, and wherein the attribute data drives presentation effects of the decompressed matched portions on the display.

Regarding claim 28, Ito et al disclose the navigation device of claim 25, wherein the navigational device transmits the decompressed matched portions to an external device.

Regarding claim 29, Ito et al disclose the navigational device of claim 25, wherein each of the three or more dimensions include cartographic data.

Regarding claim 30, Ito et al disclose the navigational device of claim 25, wherein the decompressed match portions represent in least in part a current position of the device within a route that the device is traveling along.

Regarding claim 31, Ito et al disclose the navigational device of claim 25 further comprising an audio device in cooperation with the processor, wherein the audio device communicates at least a part of the decompressed matched portions audibly.

Regarding claim 32, Ito et al disclose the navigational device of claim 25 wherein at least one of the three or more dimensions associated with the decompressed matched portions includes landmark data proximate to the navigational device.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 3-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ito et al in view of Robinson et al (5995970).

Regarding claim 3, Ito et al disclose the device of claim 1, but did not disclose a delta size associated with an optimal size to compress each coordinate data. However, Robinson et al (abstract; col. 1, lines 38-60; claim 1) disclose a storage medium for storing navigational data, wherein each dimension of coordinate data includes a delta size associated with an optimal size to pack each coordinate data.

Therefore, it would have been obvious to one of ordinary skill in the art of navigation to modify the Ito device as taught by Robinson for the purpose of saving memory space when storing navigation data.

Regarding claim 4, Ito et al (col. 1, lines 62-67) disclose the device of claim 3, wherein at least one of the coordinate data exceed the delta size associated with compressing the at least one coordinate data and wherein associating one or more special data ensures the at least one coordinate data are compressed within the delta size associated with the coordinate data.

Regarding claim 5, Ito et al disclose the device of claim 4, wherein:

each dimension is associated with a direction; and

if each direction within each dimension of each associated coordinate data proceeds in a same direction then using a single sign data (col. 2, lines 4-12) for each dimension to compress each coordinate data.

Response to Arguments

6. Applicant's arguments filed 10/08/04 have been fully considered but they are not persuasive for the following reasons:

The applicant is arguing that Ito does not disclose compression and decompression. The examiner respectfully disagrees. Applicant's arguments have no basis since the applicant gave no reason why the teaching of storage of data in the Ito disclosure does not imply data compression. Ito does not have to use the exact words that the applicant uses, but is only required to teach the limitation in the claim. In Ito fig. 4, it can be clearly seen data in fig. 4a and b are compressed/decompressed.

Next, the applicant argues that the added limitation "packing and unpacking" is not taught by the prior art. The examiner disagrees because the applicant's specification clearly indicates "compress or pack" or vice versa to have the same meaning. Therefore, the scope of the claims has not changed.

It is believed that the rejections are proper and thus stand.

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Conclusion

1. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following: US006460046B1, US006308177B1, 4827419, and 2001/0043745 all disclose compression/decompression.

Communication

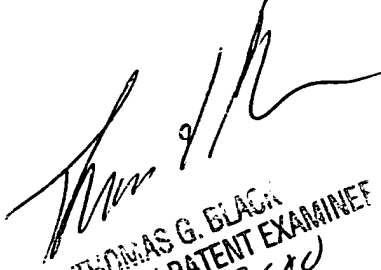
2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ronnie Mancho whose telephone number is 703-305-6318. The examiner can normally be reached on Mon-Thurs: 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Black can be reached on 703-305-8233. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1113.

Ronnie Mancho
Examiner
Art Unit 3663

10/15/04


THOMAS G. BLACK
SUPERVISORY PATENT EXAMINER
GROUP 3663